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**REMARKS**

Claims 1- 26 are currently pending in the subject application and are presently under consideration. Claims 1-3, 5-15 and 17-26 have been amended herein to correct minor informalities. Accordingly, these amendments do not necessitate a new search or any undue effort by the Examiner because they do not present new claimed subject matter.

In addition, applicants' representative notes with appreciation the indication that claims 4-6 and 16-18 would be allowable if recast in independent form to include all limitations of respective base claims and any intervening claims. It is believed such amendments are not necessary in view of the below-noted deficiencies of the cited references *vis a vis* the claimed invention. However, if necessary, applicants' representative reserves the option to amend such claims at a later date. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 1 - 26 Under 35 U.S.C. §101**

Claims 1-26 stand rejected under 35 U.S.C. §101 for being directed to non-statutory subject matter. The requirements of 35 U.S.C. §101 are satisfied if the claimed invention shows a useful, concrete and tangible result.

Because the claimed process applies the Boolean principle [abstract idea] *to produce a useful, concrete, tangible result* ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been *reduced to some practical application rendering it "useful."* *AT&T* at 1357 citing *In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (Emphasis added) (holding that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete, and tangible result of a smooth waveform display).

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The Examiner incorrectly asserts that the claimed invention merely sets forth a computer program, and thus is directed to non-statutory subject matter. According to *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999), the legal standard set forth by the Federal circuit for determining whether claims are directed towards statutory subject matter is whether the claims can be applied in a practical application to produce a useful, concrete and tangible result. The subject claims clearly meet the aforementioned legal standard. Claims 1-26 are directed towards a system that generates execution orders for function block diagrams. Such execution orders are then *provided* to control routines to perform the functionality underlying the execution orders – thus, clearly exhibiting a useful, concrete and tangible result. Furthermore, claims 13-25 are directed towards a system that generates a control routine according to the execution orders. In particular, independent claim 25 recites a system that comprises an execution order generator component and a compiler component – both of which represent *useful, concrete and tangible* results.

In view of at least the foregoing, it is readily apparent that applicants' claimed invention produces a useful, concrete and tangible result pursuant to *AT&T Corp. v. Excel Communications, Inc.* Accordingly, this rejection should be withdrawn.

## **II. Rejection of Claims 1, 7-9, 13, 19-21 and 25-26 Under 35 U.S.C. §102(e)**

Claims 1, 7-9, 13, 19-21 and 25-26 stand rejected under 35 U.S.C. §102(e) as being anticipated by Park *et al.* (US Pat. No.6,173,208). Applicant's representative respectfully requests that this rejection be withdrawn for at least the following reasons. Park *et al.* fails to disclose all limitations of the subject claims.

A single prior art reference anticipates a patent claim only if it *expressly or inherently describes each and every limitation* set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaa Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). *The identical invention must be shown in as complete detail as is contained in the ... claim.* *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

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The claimed invention relates to a system and method for function block execution order generation. In particular, independent claims 1, 13, 25 and 26 recite similar limitations, namely *generating an execution order for a function block diagram according to input data availability for the inputs of the plurality of function blocks in the function block diagram*. Park *et al.* is silent regarding such novel features of the subject claims.

Park *et al.* relates to a system that allows for conversion of a created control algorithm into executable control codes. The reference allows a user to arrange functional control blocks at a user interface that describe a sequence of control events which are then executed based on sequential ordering of identification numbers associated with each of the control blocks.

On page 3 of the Office Action, it is erroneously asserted that Park *et al.* teaches the claimed limitation of generating an execution order for a function block diagram *according to input data availability* for the inputs of the plurality of function blocks in the function block diagram. This contention is supported by a portion of the reference that recites "identification numbers of the function blocks forming the block diagram list may be out of order...to convert the first block diagram list to an executable form, identification numbers should be re-allocated in the order of actual execution." (See col. 5, lines 3-11). Thus, it is apparent that the cited reference is directed towards manually re-arranging the identification numbers associated with each user-placed block on the block diagram such that they reflect the actual order of execution. Nowhere does the reference disclose that the order of execution is based on function block input availability, but instead is limited to showing that the order of execution is based on the manual re-assignment of the identification numbers to the functional blocks. Consequently, Park *et al.* is silent with respect to generating an execution order for a function block diagram *according to input data availability*, as recited in the claimed invention.

The Examiner is reminded that the standard by which anticipation is to be measured is *strict identity* between the cited document and the invention as claimed, not mere equivalence or similarity. See, *Richardson* at 9 USPQ2d 1913, 1920. Park *et al.* fails in this respect, thus this rejection with respect to independent claims 1, 13, 25 and 26 (and the claims that depend there from) should be withdrawn.

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**III. Rejection of Claims 2-3, 10-12, 14-15 and 22-24 Under 35 U.S.C. §103(a)**

Claims 2-3, 10-12, 14-15 and 22-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Park *et al.* in view of Gretta *et al.* (US 5,971,581). It is respectfully submitted that this rejection should be withdrawn for the following reasons. The cited references, individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Gretta *et al.* does not make up for the aforementioned deficiencies of Park *et al.* with respect to independent claims 1, 13, 25 and 26 (from which the subject claims depend from). Thus, the subject invention as recited in claims 2-3, 10-12, 14-15 and 22-24 is not obvious over the combination of Park *et al.* and Gretta *et al.* Therefore, it is respectfully submitted that this rejection be withdrawn.

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CONCLUSION

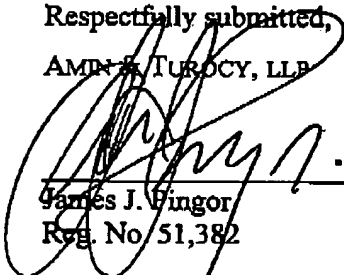
The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [ALBRP214USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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